



Value-based Project Management

An introduction

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My name is Nicoline Mulder and I'm a doctor in industrial engineering and management science. That's important for you to know, because today you get an introduction to the first approach for projects, based on scientific knowledge. That's not a pride; that's a shame. A shame because it is just now, 2014, that we are interested in scientific knowledge in project management. But I will tell you more about that later on. I'm a psychologist also. So the approach I'm going to tell you about is about psychology. Because I think that project management is about people.

If you don't agree with me, try to block that thought for an hour and a half. Just listen and relax. And after tonight, or after a night of sleep you can make up your mind. Is there something in it for me? Or is it not my cup of tea? Judge after you've heard the total presentation.

Did you see Ocean's Eleven? A complex project. Lot of stakeholders. Time pressure. Innovation. And a lot of fuzziness. Danny Ocean and his ten men reach their goal: 150 million dollar in cash and Danny Ocean got his wife back. This was a project without a plan, without a planning, without a risk analysis, without a project board. But it was a success. Maybe despite all of that. Because this project was based on shared values: value-based.

I used this movie as a metaphor while developing Value-based Project Management. As I told you I did a PhD study at the University of Eindhoven at the department of industrial engineering and management science. My drive was to bring a totally new perspective on project management. Because I believed that project management was developing itself in a tunnel. All the things we do are based on best practice. Best practices following the logic of "hey there, this

is working in my situation. You have to do it also!" But the situation of the other differs sometimes a little, sometimes a lot of mine. And if I do the things you do but in a complete other context, it will work out completely different. Because it triggers other mechanisms. Maybe better, but in most cases worse, according to the figures. That's no surprise, if we look at the history of project management. In the fifties project management, and the project management toolbox, was made for projects in which the result was clear at the very beginning. Build 100 houses in a row. Build a factory according to these specifications.

After a few years we started calling all kind of things a project. ICT, developing, research, even changes in organisations. And we still use the same toolbox, dominated by tools for controlling the project, presuppose that we know the result at the very beginning. That's not only because we do it on the basis of best practice. Or because do not have another toolbox than the one called "get grip on your project". That's also because we find it difficult to accept just anything else.

Daniël Pink told us years ago: "there is a mismatch between what social science knows and what business does". He illustrated it with the so-called candle problem. The candle problem is a very simple task. It is a combination of motoric and cognitive operations. You can do it in just a few minutes. He split the group in two subgroups. To one half he said: solve the problem. Do it fast and do it good. To the other half he said: solve the problem, do it fast and do it good and ... if you do it faster than the other group, I will give each one of you 10 bucks. And what happens? The second group took three and a half minute ... longer! So, while we know that promising a bonus leads to slower work, we still work with bonuses. This is a psychological mechanism. It is just one of the twenty-five mechanisms which I used in Value-based Project Management. Well, this one I turned upside-down of course.

Using twenty-five psychological and social mechanisms I designed an approach for complex projects, which will lead to project success. And that's necessary, knowing old fashion project management, based on best practice, and dominated by grip and control, leads to this kind of figures.

First of all we have to agree about the definition of project success. For me – and remember, I'm looking out of a totally other perspective that 'best practices' do – a project is a success when all

stakeholders are happy with the project on every moment of the project from now to two years after delivering the result.

It is not said that they get what they want on every moment, but they agree with it. Maybe because they know there are more stakeholders to take into account. And they think: my turn will come...

I'm not sure these researchers used the same definition, but I'm sure their definitions are not only about money or time.

The cause for these figures is not too little money, a misunderstanding of the question, or the lack of top management support. No, the reason for failure of complex projects is that we are using an approach, which is not made for this kind of complex projects. All the approaches we use, do come from the same perspective. They all take for account that you, or the executive, can make a smart formulation of the project result in the very beginning. The next steps is splitting the result in subprojects and make a plan to get there. All our energy is put in monitoring the time and money plan. If something happens that is not in the plan, we call it an exception. And we will treat it as a distraction. We have to make a move to get back on our initial track. This is what we call reductionism. We can split a result in parts and at the end we can put them to one big picture, like a puzzle. That is okay when you can control your environment, or when you can isolate your project from people. Like a robot. But when you can't, the puzzle part won't fit anymore. And what's the effect?

The result is according to the contract. But it does not fit in the environment by the time the project is finished. Because the world is changed...

Projects don't fail because failing people, but because assumptions which are simply no true.

We base projects on the following assumptions.

- The client knows what he wants
- The client asks the right question
- The project develops linearly
- Everything is known
- The world is relatively quiet
- The result can be divided into parts

- We know the way we should go
- We know that we can do
- Management helps
- Trust is good, control is better

Two of them are important. The first one. And the last one. Remember them: they'll come back.

These are the nowadays translations of the thoughts of the Greek philosophers Socrates, his follower Plato and his student Aristotelos, 500 years before the birth of Christ. And although these philosophers do have a lot of difference in their world vision, they also had a lot in common. All three of them thought that there was only one reality. That was the reality of what we can understand. So everything I understand is the truth, and that's all there is. If I don't understand it, it isn't there. The oration is the logic of our mind. And if there is something you don't understand, then reduce it into parts you do understand. At the end you can put it together and you will understand the whole. That reduce-thing is what we see the most by the thoughts of Plato. He called it the real, the beauty and the good thing. Three separated parts of the whole. Also Socrates, which we know from the Socratic dialogue, was a rationalist. The Socratic dialogue isn't a dialogue at all. Socrates asked questions on the market of Athene to uncover the un-logic reasoning people used. And after that, he used this knowledge to make his own reasoning better. So the one who understands the world the best, will be the leader. Like philosophers do, every next one had critics on these three, but stayed in the same stream. All of these thoughts and worldviews still rule the world. Project Management is a business in which this kind of thinking is very common.

It took about 2000 years before a philosopher with a total other perspective stood up. Not for long, because he was not understood by his friends and family, and he was banished out of the Jewish community. I'm talking about the most famous Dutch philosopher ever: Benedictus de Spinoza. He saw the nature as a whole. Everything is part of the whole and the whole is part of everything. You can't split something, because it exists because of the whole. Everything is connected to each other. If you change one thing, the whole system will change. There is no history and no future. There is only now, this moment, the whole. So you can't speak about cause and effects because the world or the nature is not a linear being. The world and the

nature is much more bigger than we can understand. So don't try to understand it, but deal with it. Spinoza looked at the world out of a totally different perspective than the Greek philosophers did. Spinoza was banned in his live. We talk about 1644. Nowadays his thoughts are accepted, and a lot of followers develop his thoughts to a higher level.

Although I do not - and I say NOT - have the least intention to put myself in the list of Socrates and Spinoza, I do see a pattern. It took about 70 years (after the fifties) before one realized that the reductionism in project management is not all there is, and is certainly not the only best way to manage projects. So let me tell you about a total new vision on project management: Value-based Project Management. And just listen. Don't judge. Let it come over you and let it be for a couple of days. If you don't like it by Monday you always can ban me if you want to. But give it a chance. For the sake of project success.

So, put on the glasses of Spinoza.

If we look at complex projects out of the perspective of Spinoza, we'll see that the assumptions we normally make, are not true.

- The client does not know what he wants
- So he does not ask the right question
- The project develops unpredictable
- Much is unknown
- The world is constantly changing
- The result cannot be divided into parts
- The way we have to go is unknown
- We do not know how we will reach the result
- Management suffocates
- Trust is good, control is disastrous

These are the facts we have to deal with. An executive does not know what he wants, does not know what his real problem is and does not know what to ask at all. We do not know what to

make or how to make it. We can't control the world. I even don't know what to eat tomorrow, how do I have to know what to deliver in 2 years?

May I ask special attention for the last one. Trust and control are two extremes on the same axes. Trust is an precarious process. Build up slowly. It is not about blue eyes, but about expectations and contact. If you control someone just once, you can start all over from the beginning of this process. So choose: trust or control, but combining it is asking for trouble.

If we make a big step, we can say that the worldview of Spinoza is translated in the chaos theory, or the complexity theory. These theories come from the mathematics. Using them in the field of social systems leads us to words as chaos thinking and complexity thinking. We call it 'thinking', just because it has not been proven enough to may use the word theory.

This kind of projects we call difficult projects, or complex, or mega, or beautiful, or stuff projects. I call them chaordic projects. It is a chaos project in which you can see the order. It is NOT from chaos to order. Order is not better then chaos. But when you look through the glasses of Spinoza, you can see an order in the chaos. It is a quite different order than planning and control. It is an order of totally other influences. I'm going to show you five of them.

CONSCIOUSNESS

When you look through the lens of Spinoza, you can see the mind of a project. It is the essential driving force of a project seen as a chaordic system. The mind, the sense, the consciousness, whatever. It is that 'thing' that you can't find in a work breakdown structure. Imagine you divide a closet of IKEA and put all the parts at a row. When you assemble the closet from the last part to the first, you have an IKEA closet again. But you can't do that with an elephant. Or with a butterfly. Or with a complex project. Because such a project has a mind. There is something in the project that ensures it is alive. It is why people want to work in it. It is an attractive 'thing' that is holding the project together. You can't see it when looking at a project from the perspective from Socrates. But you can feel it when looking through the glasses of Spinoza and consider a project as a whole.

CONNECTIVITY

Nearby the mind of a project there is the connectivity of a chaordic project. In chaordic system thinking the project is both whole and part, at the same time. No part can exist independently of the whole, nor can any whole be sustained separately from its parts. Each part is by itself a whole and this whole is part of a bigger whole. Just as a line of music notes. Every note is a whole, and a part of a whole at the same time. Or every musician is a whole and a part of an orchestra at the same time.

INDETERMINACY

Looking through the lens of Spinoza to the dynamical complexity of a project, every event is both cause and effect. Because of this complexity, the future is principally unknown in advance. There is only “now”. In which the “past” presents itself by memory. And the “future” exists as vision. This is a photo of a butterfly because of the well know butterfly-effect. The butterfly effect is an example of indeterminacy. In 1963, Edward Lorenz was a mathematician and a weather forecaster. He predicted the weather with his computer. Mind you, 1963. He used calculations with six decimals. But then his computer crashed. He entered the six numbers again but there was a complete different weather forecast. It was because the sixth number was rounded. A very small change in the computer program will change everything. He said: A butterfly in Brazil, fluttering its wings can cause a storm in London. That is because there is not only a linear dependence, but a multi-causal dependence as well. Everything is related to everything. The meaning of this order is: Focus on preparing for surprise, not planning for surprise. The answer to the “how” of change must be made up as one goes.

DISSIPATION

Projects might be seen as dissipative systems engaging in a cycle of both destruction and creation. They continuously “fall apart” and then grow back together again, each time in a novel new form, ungoverned by the past. It's like the swarm of birds flying to the south. Sometimes they are flying close to each other, then a part of them are going another path. They only have one agreement: do not clash. Imagine there is a specialist in your team that is leaving. Don't bother. Let him go. It will be all right. Another team member will show this latent specialism, or you will find another way to deal whit it. Or maybe the specialism was not that important. The

meaning of this order is: Let it go. Or even: Force it. Design a self-triggering mechanism into the project: a way to shake things up that enables the system to transform itself to a new stage.

EMERGENCE

This is the last order that you can see if you look at a chaordic project through the lens of Spinoza. It is the order of emergence. A chaordic project knows a lot of fuzziness. Especially in the beginning of a project. The executive does not know what he wants, and what to ask. You don't know which way to go or what to do. There is a lot of fuzziness, which you can't solve with more information. Just like a fog is rising, you have to wait for more clearness. So, cleaning in the beginning. Hoping for brightness after that will not help. Instead, you better can accept the fuzziness and learn to deal with it. Remember: Focus on preparing for surprise, not planning for surprise.

These five orders of structures, which you can see looking through the lens of chaordic system thinking, asks for totally other instruments to manage your project, than we are used to. On a scientific way I designed eleven of those. I call them interventions, because you can do it, you don't have to. It is not a prescriptive way of managing, but an advising way. These eleven interventions I call Project's Eleven, named after Ocean's Eleven.

- Base the approach to shared values
- Focus on the higher project goal; constantly
- Develop a project vision and keep it alive
- Handle a developing approach that allows fuzziness
- Work on trust
- Handle transformational leadership
- Wielding the conditions for self-organization
- Facilitate creativity
- Let users participate from the beginning
- Keep ranging the dialogue with stakeholders
- Use results-oriented work – but only where it fits

These eleven interventions are called the Project's Eleven. Just as the Ocean's Eleven they will perform the best if they are working together. And no matter how attractive it is to see eleven times Brad Pitt on the screen, it will not lead to project success. There is only one moment in the movie, with all the eleven actors in the same shot. It is while Danny Ocean briefs the others. For the rest of the movie there are two, three, maybe five or six actors playing together. Danny Ocean is not always the best man in the movie. He sometimes makes place for another key role player.

In the same way the interventions of Project's Eleven are working together. There are a few key-interventions, but they are not in charge all the time. Sometimes you pay attention to one or two of the others. Sometimes you pay attention to maybe six other ones. Sometimes you do it implicit, sometimes you do it explicit. But what are these interventions doing?

Every single intervention will – used in the specific context of chaordic projects – trigger a mechanism that leads to a certain outcome. That mechanism can be something like commitment, connection, motivation, trust or one of the other 20 social or psychological mechanisms I've found in the literature. All of them lead to performance improvement, creativity, team cohesion or the expected result.

But investing in all eleven interventions at the same period will generate an exceeding mechanism. I call it: 'jumping to a higher level of project maturity'. For now – or because of the time – you can see this mechanism as a black box. In my thesis you can read about it in detail.

It is important for you to know that I've made a completely different definition of project maturity. It won't surprise you, because the traditional definition doesn't fit in the perspective of chaordic system thinking. The traditional definition is about getting more control. The more control you have, the more mature your project is.

Let's make a new definition of project maturity. In the perspective of complexity, project maturity can be defined as:

“Project maturity is the extent to which a project is capable of function as autonomous project, while its autonomous position is integrated into the larger whole, at the same time.”

This is a kind of maturity that looks like human maturity. When is a child, a young-adult or a man or woman mature? When he or she is acting in a way that fits with the expectations of his family. A child of six can be mature if it behaves in a way that we expect from a child of six. A man can be immature if he behaves like an adolescent.

The same applies to projects. A project is mature when it behaves in a way that fits with the expectations of the environment. That means that a project in a complex environment (lot of stakeholders, lot of connections and interactions) needs a more mature attitude than a project in a simple environment.

The unanswered question still is: What is in the black box of the mechanisms? Is it chaos? Is it order? It is order and chaos at the same time!

In the chaos phase there is a battle going on between old and new thoughts. Old and new behavior. Old and new positions. And old and new culture.

Like twenty years ago. I got my first email account. But I had no one to email to. Because I was the only one with an email account. But I would like to email! So I told my friends about it. They thought I was crazy. ‘You don’t need a stamp anymore? That is impossible.’ And at a weak moment I thought I was crazy indeed. But I believed in it. So I made an account for all my friends. I send them emails. Some of them get excited. But others still said I was crazy. I was confused. What to do? Keep on going? Or buying stamps? Old and new thoughts and behavior were battling for attention. I just let it go and trusted on a good ending. And it did. Which one of you don’t have email, yet?

If you are interested I’ll explain to you how this mechanism works. Therefore I’m going to use the example of the midlife crisis, or - for the ones of you who don’t know what that is – the example of the adolescent child. For a certain time, everything goes fine. You are working and living in a flow and nothing special needs your attention. You don’t ask yourself questions and you don’t doubt about anything.

But then ... there is something tickling. Something small. Or something dramatic is going on in your life. But it gets your attention. You are not that happy anymore. You wake up and ask yourself: is this all? Is this all there is? You have thoughts in your head you've never had before. And you are going to behave strange. Restless. Searching ... for what? Some men are going to buy a motor. Or take a new girl friend. Or change jobs. And resell the motor. And get back to their first wife. Your family and friends think you're crazy. They call it the midlife crisis. You deny. Of course. Because for you it's normal. You can trust on your life. It takes a while. And after a few years you have found a new balance. You are happy with your boring life. You can appreciate small things. And the restless period of old thinking and new thinking is over.

Just as your grown up daughter or son. There are not many children who will stay in the adolescent period. Most of them become adults. But you can't accelerate it. You have to wait until it is over. And it will. Because you have put enough effort in the nurture of this child.

The same applies to projects. You put the effort in the Project's Eleven during a period where everything is going easily. And then, when something small or big happens, you can gather the results of it. You can lean back and trust on the effects of the project's eleven. Let me give an example of The Crossing, you know, the city bridge of Nijmegen I told you earlier about.

Last year, in November, the people in Nijmegen were awakened by a loud bang. You could hear it in a range of 20 kilometres. The boiler of the power plant had exploded. And that is right next to the central platform of the bridge construction. Chaos everywhere!

That morning we had a meeting of all project managers that work value-based. The project manager of the bridge is one of them. But we were surprised when he came into the meeting room. We asked: Did you not hear the bang? He sat back and said: "Yes, but I can't do anything now. Everyone works on the same shared values. Everyone knows the higher purpose and vision of the project. Everyone knows what to do. So I can only rely on the harvest of the Projects Eleven."

After a while the chaos was gone. And the project has found a new balance in dealing with it. And that experience leads to a jump in project maturity.

This bang was an enormous signal. It is your responsibility to recognize not only the big signals, but also the small ones. Remember the butterfly fluttering its wings. Because in the straight line there are always small signals. Most of them don't need attention. But the best project manager will recognize the small signal that needs attention and leads to a jump in project maturity.

The only question unanswered is: how do you do it? Well, a simple question leads to a beautiful conversation. And that is what Value-based Project Management is about. The conversation about the meaning, the sense, the culture, the way of working together, the understanding of each other, the conflicts, and the atmosphere of the projects. Why are we doing this? Are we doing it right? What can we do better? What is our executive waiting for? And are we helping him with this project? Will it attribute to the organization, to the strategy, to the mission? So Value-based Project Management exists of eleven cards. On the front you see a picture. It is the translation a photographer has made when she was reading my words. These are her visual interpretation of my words. On the other side you see a lot of questions. Open questions. No numbering. No order. Only a lot of questions. You can ask them yourself or use them as a tool for starting a conversation with your team, your executive or any other stakeholder. You can download them for free at www.valuebasedprojectmanagement.com.

I met a project manager who has 'the card of the week'. Everything that happens he relates to the card of the week. I met another one who simply picks up a card when he, or his counterpart, needs inspiration. I met a project manager who has printed all the questions on the wall.

Everything you do with it is okay. Because, it is not the dialogue what it is all about. It is the triggering of the mechanisms behind the interventions. The mechanisms I told you earlier about like commitment, motivation, responsibility, focusing. 25 of them. So you need planning, need a risk analysis, need budgeting as well. But you don't rely on them. Because they are 'just' tools for helping when you need it. Just like a constructor only needs a hammer out of his toolbox if he can't do it with his hands only. Just like you need small wheels at each side of your bike if you can't cycle by yourself.

A good project manager doesn't need those tools anymore to rely on. He can do it value-based. He is not predicting, but he is preparing for the future.

This article is based on the thesis 'Value-based Project Management' (2012), on the management book with the same title (2013) and on the fairy tail 'The Little Princes and the chaos in the project' (2014). Everything only in Dutch.

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